Tracheobronchial Chondritis Associated with Immune Checkpoint Blockade

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A 68-year-old man was referred to the respiratory department with a 2-week history of progressively worsening productive cough and a fever. He had a history of laryngeal carcinoma treated with concurrent chemo-radiotherapy six years earlier. He had been diagnosed with esophageal carcinoma the year before. He had been administered 5-fluorouracil and cisplatin as a first-line treatment and nivolumab as a second-line treatment for five months. His C-reactive protein level was elevated at 15.19 mg/dL. Computed tomography of the chest showed diffusely thickened bronchial walls with no active lesions in the lung (Picture A, B). Bronchoscopy revealed diffuse, swollen erythematous mucosa, which resulted in the disappearance of the cartilaginous tracheobronchial ring structure (Picture C). A histologic examination revealed active inflammation with moderate lymphocytic infiltration in the bronchial tissue (Picture D). No pathogen was detected. Serum anti-type 2 collagen antibodies were positive (53.9 index; normal range <20) (1). There were no cartilage abnormalities in the other sites, including the ears and the nose. A diagnosis of

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nivolumab-induced tracheobronchial chondritis was made. The patient was treated with 50 mg/day of prednisolone followed by tapered dosing. Tracheobronchial chondritis and associated symptoms were resolved (CT imaging 14 days after treatment; Picture E).

The authors state that they have no Conflict of Interest (COI).

Written consent for publication was obtained from the patient.

Reference


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